



Tempur-Pedic

Hand Wand

The Tempur-Pedic hand wand is a battery operated wireless remote control for use with the Raven Industries Multifunction card. It will have 14 buttons that, when pressed, will be decoded and transmitted using the 310MHz transmitter circuit. The button presses will also activate the display LED's to reflect the function pressed.

The hand wand is powered by quantity four "AAA" style batteries. The power supply circuit is diode protected against battery mis-insertion. The battery voltage is monitored to prevent operation below 3.6V. The batteries are maintained by only operating the unit for six seconds beyond any button press or a maximum of 50 seconds, otherwise the unit is in low power sleep mode.

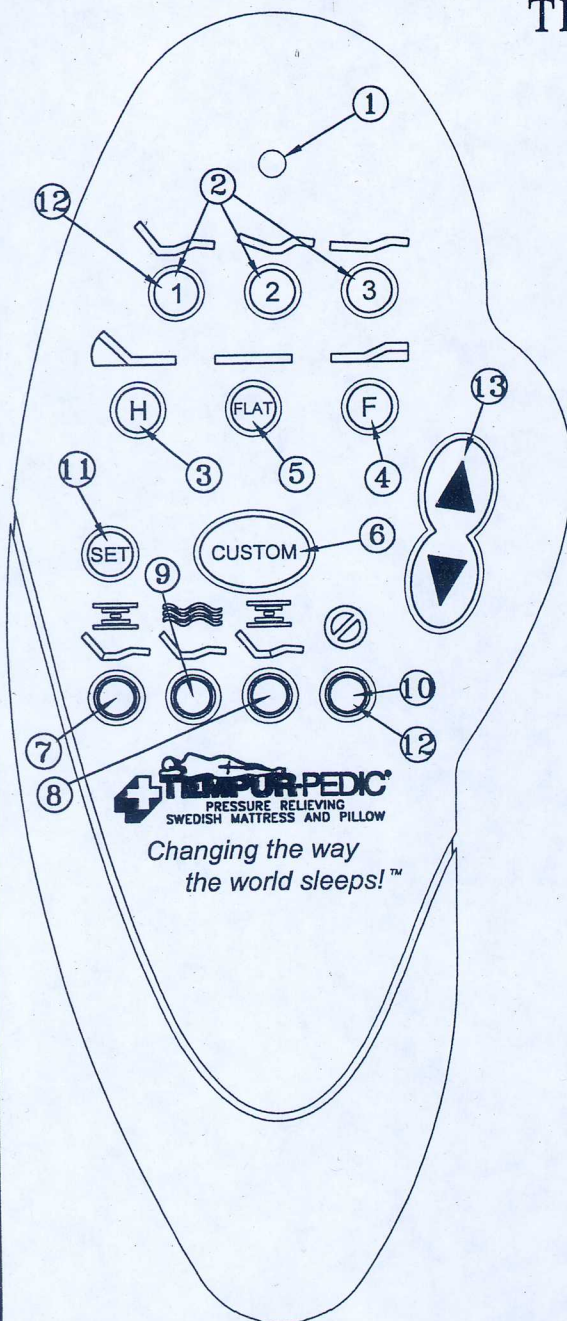
The keypad is configured as a 5 column by 4 row matrix. When in sleep mode, any button press will "wake up" the hand wand and it will begin decoding the matrix. While in "Run" mode, it is constantly decoding the matrix.

The hand wand has three visual indicators: the transmit LED, backlights, and select light. The transmit LED echoes back the transmitted signal, the six backlight LEDs active mean the wand is in run mode, and the select LED indicated which function (button) has been selected. All indicators turn off in sleep mode.

The radio frequency transmitter section is a SAW stabilized On-Off Keying transmitter. After a button has been decoded, a series of digital (on/off) pulses is sent to the transmitter circuit for modulation onto the 310 MHz carrier. The pulse train consists of a one millisecond pulse followed by several 500 usecond pulses representing the command sent. This information will be repeated every 131 milliseconds. The total ON time of the carrier should be less than 10% of the total duty cycle.

TEMPUR-PEDIC

MF#624
REV A



① TRANSMISSION INDICATOR LIGHT:

Verifies a button is being pressed.

② POSITION BUTTONS:

Press and release position button and the bed will automatically move to selected position. To stop the bed while in motion press and hold any button until the bed stops.

③ HEAD BUTTON:

To raise and lower the head, press and release the button labeled "H" and then use the UP or DOWN buttons ⑬ to raise or lower from the current position.

④ FOOT BUTTON:

To raise and lower the foot, press and release the button labeled "F" and then use the UP or DOWN buttons ⑬ to raise or lower from the current position.

⑤ FLAT BUTTON:

Pressing and releasing "FLAT" will turn off all massage or wave operations and return head and foot to the level position.

⑥ CUSTOM BUTTON:

Pressing and releasing "CUSTOM" will recall the settings saved when "SET" was last pressed and adjusts head, foot, and massage/wave from the current settings. To stop the bed while in motion press and hold any button until the bed stops.

⑦ HEAD MASSAGE (VIBRATOR) BUTTON:

Pressing and releasing the Head Massage button will activate the head massage to a mid-range value or it's setting when it was last turned off. The UP and DOWN buttons ⑬ can then be used to adjust the massage intensity.

⑧ FOOT MASSAGE (VIBRATOR) BUTTON:

Pressing and releasing the Foot Massage button will activate the Foot massage to a mid-range value or it's setting when it was last turned off. The UP and DOWN buttons ⑬ can then be used to adjust the massage intensity.

⑨ WAVE MESSAGE BUTTON:

Pressing and releasing Wave will activate the low or previous wave setting on which of massage motors is/are active. The UP and DOWN buttons ⑬ can then be used to adjust the wave speed.

⑩ OFF BUTTON:

Pressing and releasing the "Off" button will turn off whichever is selected: head massage, foot massage, or wave. The function to be turned off will be the function selected prior to pressing the "Off" button.

⑪ SET BUTTON:

Pressing and releasing "SET" will save the current head, foot, and massage/wave settings for later recall.

⑫ AUTO LEARN FUNCTION:

Auto Learn is only active for 90 seconds once enabled. To enable Auto Learn, choose the option that meets the bed setup.

- For Powerdown box equipped beds, press the Learn button on the Powerdown Box for 1 (one) second and release.
- For beds without Powerdown, Unplug the bed from wall outlet for 20 seconds, then plug bed back into outlet to reset system.

Next, simultaneously press and hold the "1" ⑫ and "OFF" ⑫ buttons. While holding these buttons the LED transmission indicator light (at the top of the wand) will flash slowly and then it will begin flashing rapidly. Continue to hold for 2 seconds then release. The new wand code has been learned.

⑬ UP & DOWN ARROWS:

These buttons are used to adjust Head and Foot positions, Head and Foot massage intensity, and Wave massage intensity after the desired function has been selected.

OTHER FEATURES:

- * To conserve battery life, the transmitter turns off all functions if any button is pressed for more than 50 consecutive seconds.
- * Transmission indicator light verifies a button is being pressed and data is being sent to the bed.